Preface

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Version 1.0

Disclaimer

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Trademark Recognition

Windows® 7/8 are registered trademarks of Microsoft Corp.

Other product names used in this manual are the properties of their respective owners and are acknowledged.

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment onto an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Shielded interconnect cables and a shielded AC power cable must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

Declaration of Conformity

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation

CE

This product has been tested and found to comply with the limits of the European Council Directive on the approximation of the laws of the member states relating to electromagnetic compatibility according to 2004/108/EC.

Canadian Department of Communications

This class B digital apparatus meets all requirements of the Canadian Interferencecausing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilieur du Canada.

Safety Instructions

Your system is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

Setting up your system

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water or a heated source such as a radiator.
- Set up the system on a stable surface.
- Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- Use this product in environments with ambient temperatures between 0°C and 40°C.
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

Attention during use

- Do not step on the power cord or let anything rest on top of it.
- Do not spill water or any other liquid on your system.
- When the system is turned OFF, a small amount of electrical currentstill flows. Always unplug all power, modem, and network cables from the power outlets before cleaning the system.
- If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
 - The power cord or plug is damaged.
 - Liquid has been spilled into the system.
 - The system does not function properly even if you follow the operating instructions.
 - The system was dropped or the cabinet is damaged.
 - The system performance changes



The warranty does not apply to products that have been disassembled by users.

Safety cautions and warnings

Optical Drive Safety Information

Optical drive sold with this system contains a CLASS 1 LASER PRODUCT.



CAUTION:

Invisible laser radiation when open. Do not stare into beam or view directly with optical instructions.



WARNING:

Makeing adjustments or performing procedures other than those specified in the user's manual may result in hazardous laser exposuer. Do not attempt to disassemble the optical drive. For your safety, have the optical drive serviced only by an authorized service provider.

Product disposal notice



INPORTANT:

This symbol if the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

Nordic Lithium Cautions (for lithium-ion batteries)



CAUTION:

Danger of explosoin if battery is incorrectly replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Product disposal notice



- 1. Do not place this product underneath heavy loads or in an unstable position.
- 2. Do not use or expose this product around magnetic fields as magnetic interference may affect the performance of the product.
- 3. Do not expose this product to high levels of direct sunlight, high-humidity or wet conditions.
- 4. Do not block the air vents to this product or impede the airflow in any way.

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Chapter 1 *Introducing the PC*

Introduction

Thank you for choosing AIO PC, which has great performance with stylish and power saving design, which will surely give you an exciting PC experience.

1.1 Specifications

Display Panel	•	 19.5" LED backlight LCD 16:9, 1600 x 900, Option: Capacitive 10-finger multi-touch 	
Chipset • Intel®		Intel® H81	
Processor	•	Intel® 4th-new & 4th Gen Core TM Processor LGA 1150 Socket (Support CPU TDP up to 65W)	
Memory	•	Support 2 x DDR3 1600 SO-DIMM, up to 16GB Support 1 x mSATA	
Storage	•	Support 1 x 2.5" SATA III HDD	
Wireless	•	Support IEEE 802.11b/g/n. and Bluetooth 4.0 (Optional)	
Power Supply	•	Adapter 19v, 120W	
VESA	•	75mm x 75mm	
I/O (Side)	•	2 x USB 3.0 1 x Mic-in 1 x Headphone 1 x 3-in-1 Card Reader (SD/MMC/MS)	
I/O (Rear)	•	3 x USB 2.0 1 x HDMI out 1 x DC-IN port 1 x Giga LAN 1 x COM port (optional)	
Dimension	•	484(W) x 335(H) x 38(D) mm	

1.2 Front view



Note:

ID design may vary.

Webcam/Webcam LED Light

The built-in webcam with the microphone can be used for picture taking, video recording, online conference and any other interactive applications. Webcam LED light is on when webcam is activated.

Built-in Microphone

The built-in microphone can be used for online video chatting.

LCD/LED Display

The 19.5-inch TFT LCD/LED display is with an optimal resolution of 1600X 900.

Speakers

The built-in stereo speakers deliver high quality sound blaster with stereo system and Hi-Fi function supported.

Power LED Light

The Power LED light indicates the different stage of system mode. When booting the system, Power LED light is steady on, and it will always be on during user operating the system. And when system is in sleep mode (S3), Power LED light is blinking. And when system is in hibernating mode (S4) and power off mode, Power LED light is off.



WARNING:

Do not thrust the speaker with your fingers or sharp-pointed things such as pens.

Introducing the PC

1.3 Left view of the computer



- 1. Power Button
- 2. Brightness/Volume Up
- 3. Brightness/Volume Down
- 4. USB 3.0 Ports
- 5. Multi Card Reader
- 6. Headphone Jack
- 7. Microphone Jack

1.Power Button

Press the power button to turn the system on and off. The power LED is on when you turn on the system; the power LED is off when you turn off the system.

2.Brightness/Volume Up*

Press this button to turn up the brightness of screen or turn up the volume.

3.Brightness/Volume Down*

Press this button to turn down the brightness of screen or turn down the volume.

Note:



*1.If you press the Brightness/Volume Up/Down button for less than 3s, the volume will be up/down for a step; and if you press the Brightness/Volume Up/Down button for more than 3s, the screen brightness will be up/down for a step.

2.If you press the Brightness/Volume Up/Down button for more than 3s, it switches into brightness adjustment mode which will last for nearly 30s, and if you press it for less than 3s, the mode will not be switched. After more than 30s idle, if you press it for less than 3s, it switches back to volume adjustment mode.

Introducing the PC

4.USB 3.0 Ports

The USB (Universal Serial Bus) 3.0 ports are provided for attaching USB 3.0 devices such as mouse, keyboard, printer, scanner, camera, PDA or other USB 3.0 compatible devices.

5.Multi Card Reader

The build-in card reader may support various types of memory card, such as SD (Secure Digital), MS (Memory Stick) or MMC (Multi-Media Card) cards that usually used in devices like digital cameras, MP3 players, mobile phones and PDAs. Contact the local dealer for further information and please be noted that the supported memory cards may vary without notice.

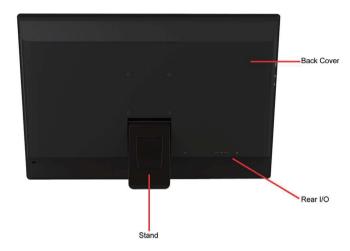
6.Headphone Jack (Green)

This is a jack for headphone.

7.Microphone Jack (Pink)

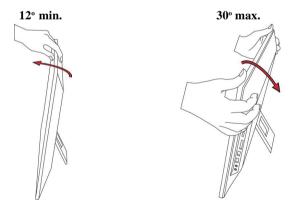
This is a jack for microphone.

1.4 Back view



Computer stand

Use the stand to position the display to your preference. The tilt down degree of monitor can be adjusted from 12° to 30° to meet all kinds of working environments. You can slightly push the computer backwards to increase the tilt down degree, otherwise, you can slightly pull the computer to decrease the tilt down degree. Please refer to the following pictures. The stand provides stability to the computer, please remain installed all the time to ensure maximum system stability.



Introducing the PC

Rear I/O

There are many ports below of the main chassis, such as USB ports, DC-in jack and LAN connector. Please refer to the specification on Page 1. You will find the I/O position as below.





Note:

The descriptions in this part might vary from your computer, depending on motherboard model and configurations.

1.5 Connecting your computer

Use the following information to connect your computer:

Look for the small connector icons on the back of your computer. Match the connectors to the icons.



Note:

Your computer might not have all of the connectors that are described in this section. It mainly depend the motherboard you choose.

1. Check the voltage rating before you connect the equipment to an electrical outlet to ensure that the required voltage and frequency match the available power source.







Note:

After you connect the AC/DC Adapter and the AC Power Core, please connect the AC/DC Adapter to the DC-IN power connector in the Inside I/O port of the computer first, then connect the AC Power Cord to the power.

2. Connect the R45J LAN cable to the LAN port.



3. Your computer is equipped with a Memory Card Reader Connector, it is able to read/write data from: SD/MMC/MS.

Packing Contents



Driver DVD



Manual







NOTE:

Please contact us immediately if any of the items is damaged or missing.

Chapter 2 Installing the System

2.1 Safety Precautions

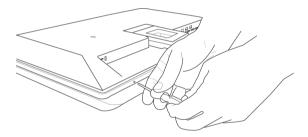
Follow these safety precautions when installing the system:

- Wear a grounding strap attached to a grounded device to avoid damage from static electricity.
- Discharge static electricity by touching the metal case of a safely grounded object before working on the motherboard.
- Leave components in the static-proof bags.
- Always remove the AC power by unplugging the power cord from the power outlet before installing.

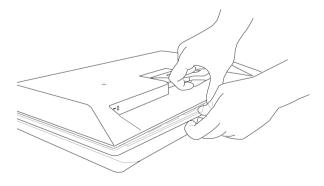
2.2 Open the Chassis

Please refer to the following pictures to open the chassis.

Step 1. Loosen the four screws on bottom side of chassis.



Step 2. Pull open the middle part of the chassis.

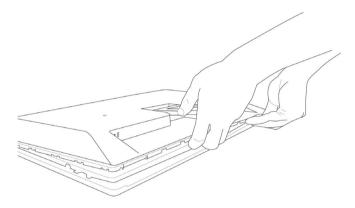


Installing the System

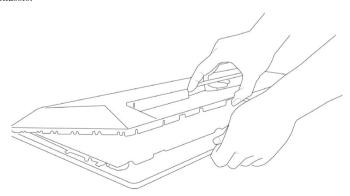
Step 3. Follow the gesture as picture showed to unlock the hooks of left side.



Step 4. Follow the gesture as picture showed to unlock the hooks of right side.



Step 5. After unlock the hooks, hold the stand to lift up the back cover and open the chassis.



Installing the System

2.3 Install the Key Components

2.3.1. Installing Memory Modules

- Do not remove any memory module from its antistatic packaging until you are ready to install it on the motherboard. Handle the modules only by their edges. Do not touch the components or metal parts. Always wear a grounding strap when you handle the modules.
- You must install one module in the slot. And one slot maximum supports
 8 GB, total memory capacity of the two slots is 16 GB.
- Refer to the following to install the memory modules.
- Install the memory module into the slot and press it firmly down until it
 fits in place. Check that the cutouts on the memory module edge
 connector match the notches in the memory slot.



2.3.2. Installing Add-on Cards

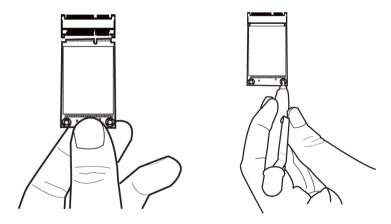
The slots on this motherboard, which support wifi card and mSATA card, are designed to enhancing the system's features and capabilities. With these efficient facilities, you can experience a convenient wireless environment and a high operation speed increase the capabilities by adding hardware that performs tasks that are not part of the basic system.

The slot 1 (half card size) goes with PCIe and USB signal is reserved for wifi card. The slot 2 (full card size) goes with PCIe/USB/SATA signal, which can be used for mSATA SSD card.



Follow these instructions to install a wifi card and mSATA card:

- 1. Insert a wifi card or mSATA card into the slot.
- 2. Lower the handle and tighten the screws.



Installing the System

2.3.3. Installing a Hard Disk Drive

This AIO PC features one SATA connector supporting one 2.5" hard disk drive.

· Loosen three screws to get the Hard disk cage off.



· Fix the Hard disk by four screws on the side.



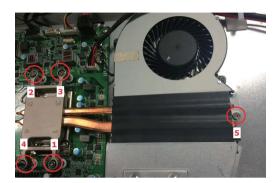
 Assemble the Hard disk cage back to the chassis and connect to the SATA cable.



Installing the System

2.3.4. Installing the Heatpipe

Fix the Heatpipe by the five screws in numerical order.



2.4 Install the VESA Mount

This AIO PC supports standard 75 x 75mm VESA mount, and just need to remove the four rubbers of the back cover.



2.5 Motherboard Components

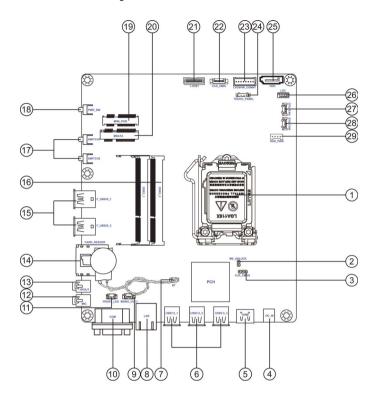


Table of Motherboard Components

LABEL	COMPONENTS
1. CPU Socket	Intel [®] 4 th -new & 4 th Gen Core Processor LGA 1150 Socket
2. ME_UNLOCK	ME Unlock header with jumper
3. CLR_CMOS	Clear CMOS header with jumper
4. DC_IN	DC in connector
5. HDMI	HDMI connector
6. USB2 0_1~3	USB 2.0 connectors
7. BT	Battery connector
8. LAN	LAN connector
9. MONO_OUT1	Internal Speakers Header
10. COM	Onboard serial port header
11. FRONT_LED	Power LED header
12. MIC	Microphone connector
13. HPOUT	Headphone out connector
14. CARD_READER	Card reader slot
15. F_USB3 0_1~2	Front panel USB 3.0 ports
16. DDR3_1~2	204-pin DDR3 SDRAM slots
17. SWITCH1~2	Brightness/Volume Up/Down buttons
18. PWR_SW	Power on/off button
19. MINI_PCIE	Mini card slot
20. MSATA	Mini card slot
21. LVDS1	LVDS connector
22. CCD_DMIC	Webcam header
23. LVDSPW_CONN1	LVDS power header
24. TOUCH_PANEL	Touch panel connector
25. HDD	SATA II connector
26. LDC	Debug card header
27. CPU_FAN	CPU cooling fan connector
28. SYS_FAN	System cooling fan connector
29. HDD_PWR	HDD power connector

2.6 Checking Jumper Settings

This section explains how to set jumpers for correct configuration of the motherboard.

Setting Jumpers

Use the motherboard jumpers to set system configuration options. Jumpers with more than one pin are numbered. When setting the jumpers, ensure that the jumper caps are placed on the correct pins.

The illustrations show a 2-pin jumper. When the jumper cap is placed on both pins, the jumper is SHORT. If you remove the jumper cap, or place the jumper cap on just one pin, the jumper is OPEN.

This illustration shows a 3-pin jumper. Pins 1 and 2 are SHORT.





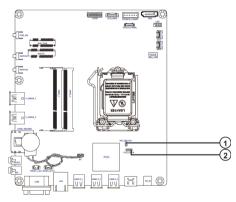
SHORT

OPEN



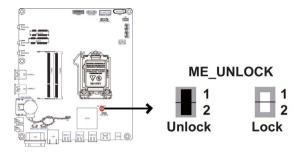
Checking Jumper Settings

The following illustration shows the location of the motherboard jumpers. Pin 1 is labeled.



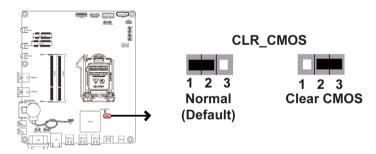
No.	Components	
1	ME_UNLOCK	
2	CLR_CMOS	

1. ME_UNLOCK: ME Unlock Header With Jumper



2. CLR_CMOS: Clear CMOS Header With Jumper

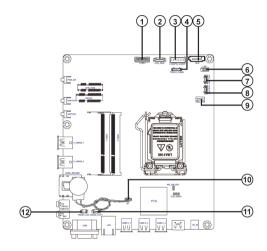
The following illustration shows the location of the motherboard jumpers. Pin 1 is labeled.





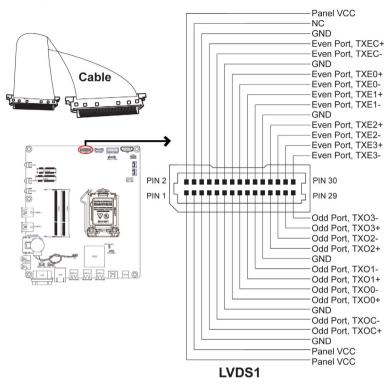
To avoid the system unstability after clearing CMOS, we recommend users to enter the main BIOS setting page to "Load Default Settings" and then "Save and Exit Setup".

2.7 Connecting Devices



No.	Components	No.	Components
1	LVDS1	7	CPU_FAN
2	CCD_DMIC	8	SYS_FAN
3	LVDSPW_CONN1	9	HDD_PWR
4	TOUCH_PANEL	10	ВТ
5	HDD	11	MONO_OUT1
6	LDC	12	FRONT_LED

1. LVDS1: LVDS Connector

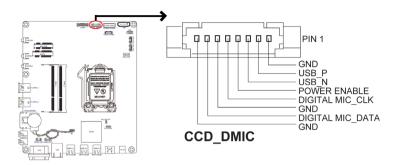


1. You can connect the large end of the cable to the LED Panel, and connect the other small end to the slot on the motherboard.

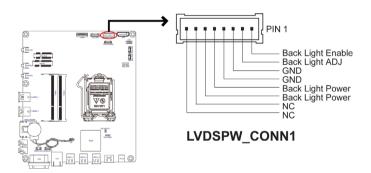


2.Due to the chipset limitation, using dual displays LVDS(AIO) + VGA or LVDS(AIO) + HDMI will cause the problem that you may not enter BIOS setup or have the display problem.

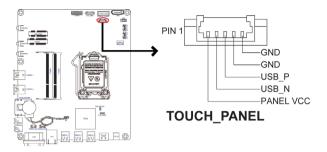
2. CCD_DMIC: Webcam Header



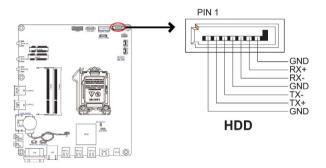
3. LVDSPW_CONN1: LVDS Power Header



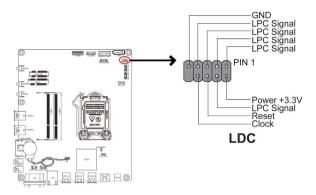
4. TOUCH_PANEL: Touch Panel Connector



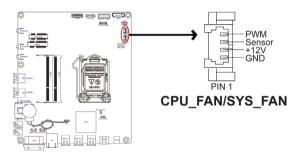
5. HDD: SATA II Connector



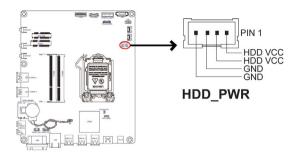
6. LDC: Debug Card Header



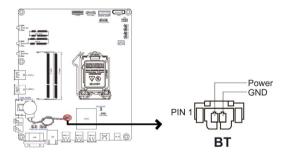
7 & 8. CPU_FAN: CPU Cooling FAN Connector & SYS_FAN: System Cooling FAN Connector



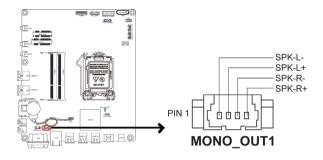
9. HDD_PWR: HDD Power Connector



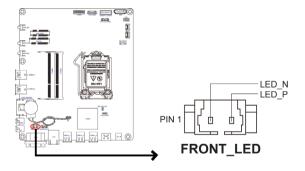
10. BT: Battery Connector



11. MONO_OUT1: Internal Speakers Header



12. FRONT_LED: Power LED Header



Chapter 3 Using BIOS

About the Setup Utility

The computer uses the latest "American Megatrends Inc." BIOS with support for Windows Plug and Play. The CMOS chip on the motherboard contains the ROM setup instructions for configuring the motherboard BIOS.

The BIOS (Basic Input and Output System) Setup Utility displays the system's configuration status and provides you with options to set system parameters. The parameters are stored in battery-backed-up CMOS RAM that saves this information when the power is turned off. When the system is turned back on, the system is configured with the values you stored in CMOS.

The BIOS Setup Utility enables you to configure:

- · Hard drives, diskette drives and peripherals
- · Video display type and display options
- · Password protection from unauthorized use
- · Power Management features

The settings made in the Setup Utility affect how the computer performs. Before using the Setup Utility, ensure that you understand the Setup Utility options.

This chapter provides explanations for Setup Utility options.

The Standard Configuration

A standard configuration has already been set in the Setup Utility. However, we recommend that you read this chapter in case you need to make any changes in the future.

This Setup Utility should be used:

- · when changing the system configuration
- when a configuration error is detected and you are prompted to make changes to the Setup Utility
- · when trying to resolve IRQ conflicts
- when making changes to the Power Management configuration
- when changing the password or making other changes to the Security Setup

Entering the Setup Utility

When you power on the system, BIOS enters the Power-On Self Test (POST) routines. POST is a series of built-in diagnostics performed by the BIOS. After the POST routines are completed, the following message appears:

Press DEL to enter SETUP

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.

Main Advanced Chipset Tweak Boot Security Exit Choose the system default **BIOS Information** language System Date [Wed 08/27/2014] + ← ·Select Screen System Time [02:03:19] ↑↓ :Select Item Enter: Select +/- :Change Opt. F1:General Help F2:Previous Values F3:Optimized Defaults F4-Save & Exit **ESC:Exit**

Press the delete key to access BIOS Setup Utility.

Resetting the Default CMOS Values

When powering on for the first time, the POST screen may show a "CMOS Settings Wrong" message. This standard message will appear following a clear CMOS data at factory by the manufacturer. You simply need to Load Default Settings to reset the default CMOS values.

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Note: Changes to system hardware such as different CPU, memories, etc. may also trigger this message.



Using BIOS

When you start the Setup Utility, the main menu appears. The main menu of the Setup Utility displays a list of the options that are available. A highlight indicates which option is currently selected. Use the cursor arrow keys to move the highlight to other options. When an option is highlighted, execute the option by pressing <Enter>.

Some options lead to pop-up dialog boxes that prompt you to verify that you wish to execute that option. Other options lead to dialog boxes that prompt you for information.

Some options (marked with a triangle ▶) lead to submenus that enable you to change the values for the option. Use the cursor arrow keys to scroll through the items in the submenu.

In this manual, default values are enclosed in parenthesis. Submenu items are denoted by a triangle \triangleright .



The default BIOS setting for this motherboard apply for most conditions with optimum performance. We do not suggest users change the default values in the BIOS setup and take no responsibility to any damage caused by changing the BIOS settings.

BIOS Navigation Keys

The BIOS navigation keys are listed below:

KEY	FUNCTION		
ESC	Exits the current menu		
↑↓→⊷	Scrolls through the items on a menu		
+/-	Modifies the selected field's values		
Enter	Select		
F1	General Help		
F2	F2 Previous Values		
F3	Optimized Defaults		
F4	F4 Save & Exit		



For the purpose of better product maintenance, the manufacture reserves the right to change the BIOS items presented in this manual. The BIOS setup screens shown in this chapter are for reference only and may differ from the actual BIOS. Please visit the manufacture's website for updated manual.

Main Menu

When you enter the BIOS Setup program, the main menu appears, giving you an overview of the basic system information. Select an item and press <Enter> to display the submenu.

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc. Main Advanced Chipset Tweak Boot Security Exit			
BIOS Information	(Carlish)	Choose the system default language	
System Language			
System Date System Time	[Wed 08/27/2014] [02:03:19]	→ Select Screen Select Item Enter: Select F1: Change Opt. F1: General Help F2: Previous Values S3: Optimized Defaults F4: Save & Exit ESC: Exit	
Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.			

System Language (English)

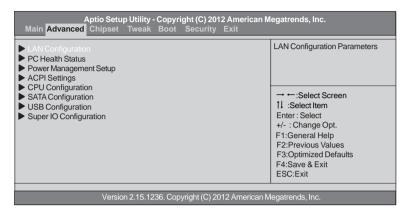
This item is used to set the language.

System Date & Time

The Date and Time items show the current date and time on the computer. If you are running a Windows OS, these items are automatically updated whenever you make changes to the Windows Date and Time Properties utility.

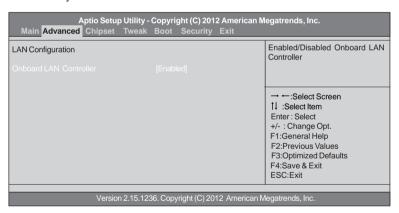
Advanced Menu

The Advanced menu items allow you to change the settings for the CPU and other system.



▶LAN Configuration

The item in the menu shows the LAN-related information that the BIOS automatically detects.

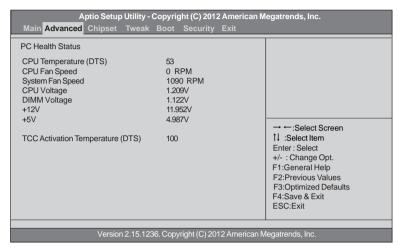


Onboard LAN Controller (Enabled)

Use this item to enable or disable the Onboard LAN.

▶PC Health Status

On motherboards support hardware monitoring, this item lets you monitor the paremeters for critical voltages, temperatures and fan speeds.



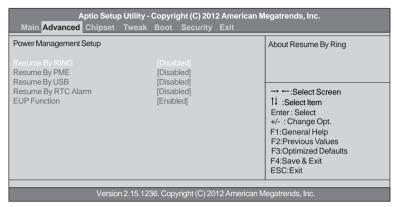
System Component Characteristics

These items display the monitoring of the overall inboard hardware health events, such as System & CPU temperature, CPU & DIMM voltage, CPU & system fan speed,... etc.

- CPU Temperature (DTS)
- · CPU Fan Speed
- System Fan Speed
- CPU Voltage
- DIMM Voltage
- +12V
- +5V

▶Power Management Setup

This page sets up some parameters for system power management operation.



Resume By Ring (Disabled)

An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from a soft off state.

Resume By PME (Disabled)

The system can be turned off with a software command. If you enable this item, the system can automatically resume if there is an incoming call on the PCI/PCI-E Modem or PCI/PCI-E LAN card. You must use an ATX power supply in order to use this feature. Use this item to do wake-up action if inserting the PCI/PCI-E card.

Resume By USB (Disabled)

This item allows you to enable or disable the USB device wakeup function from S3 mode.

Resume By RTC Alarm (Disabled)

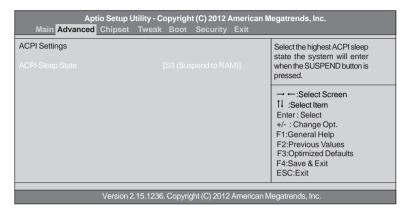
The system can be turned off with a software command. If you enable this item, the system can automatically resume at a fixed time based on the system's RTC (realtime clock). Use the items below this one to set the date and time of the wake-up alarm. You must use an ATX power supply in order to use this feature.

EUP Function (Enabled)

This item allows user to enable or disable EUP support.

▶ACPI Settings

The item in the menu shows the highest ACPI sleep state when the system enters suspend.

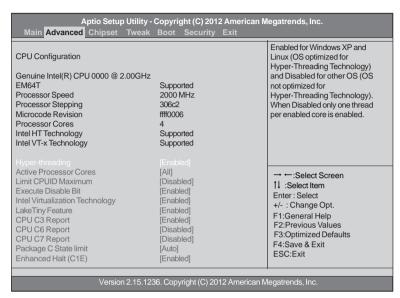


ACPI Sleep State (S3(Suspend to RAM))

This item allows user to enter the ACPI S3 (Suspend toRAM) Sleep State(default).

▶CPU Configuration

The item in the menu shows the CPU information.



Genuine Intel(R) CPU 0000 @ 2.00GHz

This is display-only field and displays the information of the CPU installed in your computer.

EM64T (Supported)

This item shows the computer supports EM64T.

Processor Speed (2000 MHz)

This item shows the current processor speed.

Processor Stepping (306c2)

This item shows the processor stepping version.

Microcode Revision (ffff0006)

This item shows the Microcode version.

Processor Cores (4)

This item shows the core number of the processor.

Intel HT Technology (Supported)

This item shows the computer supports Intel HT technology or not.

Intel VT-X Technology (Supported)

This item shows the computer supports Intel VT-X technology or not.

Hyper-Threading (Enabled)

This item only available when the chipset supports Hyper-threading and you are using a Hyper-threading CPU.

Active Processor Cores (All)

Use this item to control the number of active processor cores.

Limit CPUID Maximum (Disabled)

Use this item to enable or disable the maximum CPUID value limit, you can enable this to prevent the system from "rebooting" when trying to install Windows NT 4.0.

Excute Disable Bit (Enabled)

This item allows the processor to classify areas in memory by where application code can execute and where it cannot. When a malicious worm attempts to insert code in the buffer, the processor disables code execution, preventing damage or worm propagation. Replacing older computers with Execute Disable Bit enabled systems can halt worm attacks, reducing the need for virus related repair.

Intel Virtualization Technology (Enabled)

When enabled, a VMM can utilize the additional hardware capabilities provided by Vandor Pool Technology.

LakeTiny Feature (Enabled)

Use this item to enable or disable the LakeTiny for C state configuration.

CPU C3 Report (Enabled)

Use this item to enable or disable CPU C3 (ACPI C2) report to OS.

CPU C6 Report (Disabled)

Use this item to enable or disable CPU C6 (ACPI C3) report to OS.

CPU C7 Report (Disabled)

Use this item to enable or disable CPU C7 report to OS.

Package C State limit (AUTO)

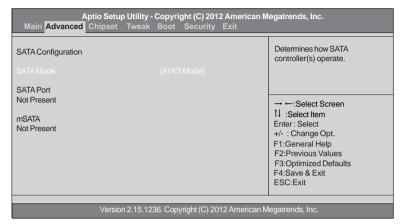
Use this item to set the package C state limit.

Enhanced Halt (C1E) (Enabled)

Use this item to enable the CPU energy-saving function when the system is not running.

▶SATA Configuration

Use this item to show the mode of serial SATA configuration options.



SATA Mode (AHCI Mode)

Use this item to select SATA mode.

SATA Port/mSATA (Not Present)

This motherboard supports one SATA and one mSATA channel, and each channel allows one SATA/mSATA device to be installed. These items will display the information of devices installed.

▶USB Configuration

Use this item to show the information of USB configuration.

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc. Main <mark>Advanced</mark> Chipset Tweak Boot Security Exit				
USB Configuration		USB Support Parameters		
All USB Devices				
Legacy USB Support	[Enabled]	→ → :Select Screen 11 :Select Item Enter : Select +/- : Change Opt. F1:General Help F2:Previous Values F3:Optimized Defaults F4:Save & Exit ESC:Exit		
Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.				

All USB Devices (Enabled)

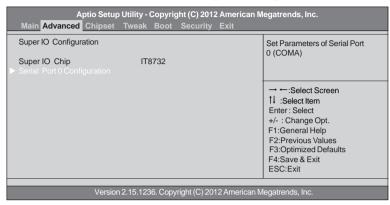
Use this item to enable or disable all USB devices.

Legacy USB Support (Enabled)

Use this item to enable or disable support for legacy USB devices.

▶Super IO Configuration

Use this item to show the information of super IO configuration.

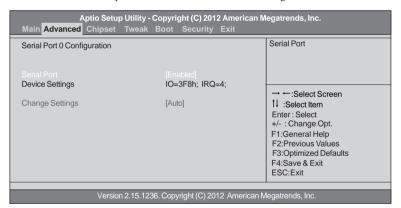


Super IO Chip (IT8732)

This item shows the information of the super IO chip.

▶ Serial Port 0 Configuration

Scroll to this item and press <Enter> and view the following screen.



Serial Port (Enabled)

This item allows you to enable or disable serial port.

Device Settings (IO=3F8h; IRO=4)

This item shows the information of the device settings.

Change Settings (Auto)

Use this item to change device settings.

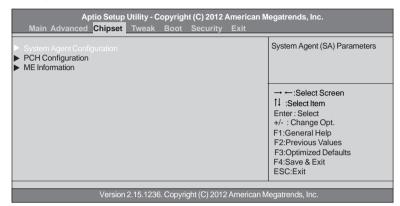
Press <Esc> to return to the Super IO Configuration page.

Press <Esc> to return to the Advanced Menu page.

Using BIOS

Chipset Menu

The chipset menu items allow you to change the settings for the SoC chip and other system.



▶ System Agent Configuration

Scroll to this item and press <Enter> and view the following screen.

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc. Main Advanced Chipset Tweak Boot Security Exit				
System Agent Configuration IGD Memory DVMT Memory	[64M] [256M]	Select DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the Internal Graphics Device.		
CPU SA Audio Device	[Enabled]	→ :Select Screen 11 :Select Item Enter : Select +/- : Change Opt. F1:General Help F2:Previous Values F3:Optimized Defaults F4:Save & Exit ESC:Exit		
Version	2.15.1236. Copyright (C) 2012	American Megatrends, Inc.		

IGD Memory (64M)

This item shows the information of the IGD (Internal Graphics Device) memory.

DVMT Memory (256M)

When set to Fixed Mode, the graphics driver will reserve a fixed position of the system memory as graphics memory, according to system and graphics requirements.

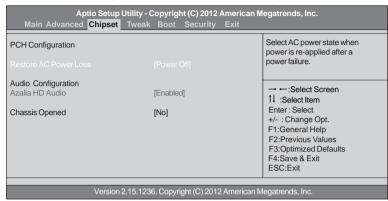
CPU SA Audio Device (Enabled)

This item allows you to enable or disable the CPU SA Audio device.

Press <Esc> to return to the Chipset Menu page.

▶ PCH Configuration

Scroll to this item and press <Enter> and view the following screen.



Restore AC Power Loss (Power Off)

This item enables your computer to automatically restart or return to its operating status.

Azalia HD Audio (Enabled)

This item enables or disables Azalia HD audio.

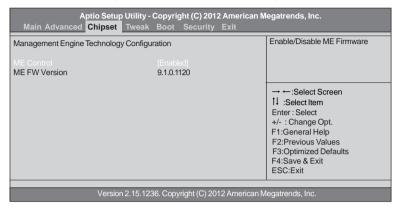
Chassis Opened (No)

This item indicates whether the case has been opened.

Press <Esc> to return to the Chipset Menu page.

▶ ME Configuration

Scroll to this item and press <Enter> to view the following screen.



ME Control (Enabled)

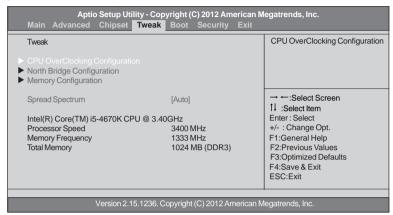
Use this item to enable or disable the ME Firmware.

ME FW Version (9.1.0.1120)

This item shows the ME Firmware Version.

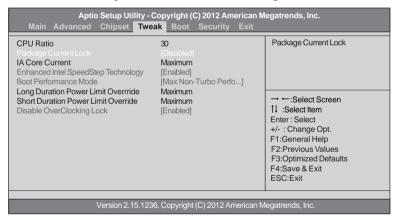
Tweak Menu

This page displays the information of clock speeds and enables you to set the memory voltage for your system. The clock speeds are determined by the kind of processor installed in your system.



► CPU OverClocking Configuration

Scroll to this item and press <Enter> to view the following screen.



CPU Ratio (30)

This item allows user to control non turbo CPU ratio.

Package Current Lock (Disabled)

This item allows you to enable or disable the package current lock.

IA Core Current (Maximum)

This item allows you to set IA Core Current Max.

Enhanced Intel SpeedStep Technology (Enabled)

This item allows you to enable or disable the EIST (Enhanced Intel SpeedStep Technology).

Boot Performance Mode (Max Non-Turbo Perfo...)

Use this item to select the performance state that the BIOS will set before OS handoff.

Long Duration Power Limit Override (Maximum)

Intel(R) Turbo Boost Technology will use this power limit during the long duration power limit time window.

Short Duration Power Limit Override (Maximum)

Intel(R) Turbo Boost Technology will use this power limit for a very short duration. After that, the long duration power limit will be honored.

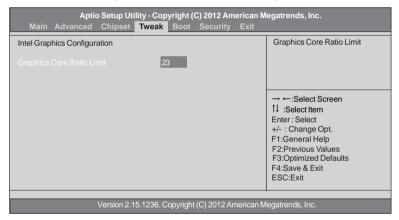
Disable OverClocking Lock (Enabled)

This item allows you to control the OverClocking lock.

Press <Esc> to return to the Tweak Menu page.

▶ North Bridge Configuration

Scroll to this item and press <Enter> to view the following screen.



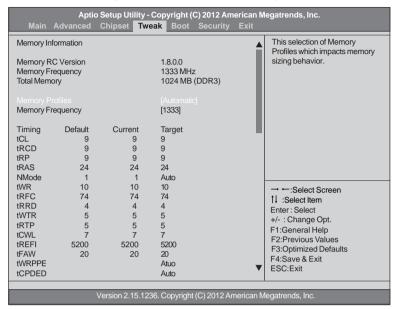
Graphics Core Ratio Limit (23)

This item allows you to control the internal GFX core ratio.

Press <Esc> to return to the Tweak Menu page.

► Memory Configuration

Scroll to this item and press <Enter> to view the following screen.



Memory RC Version (1.8.0.0)

This item shows the information of the memory RC version.

Memory Frequency (1333 MHz)

This item shows the information of the memory frequency.

Total Memory (1024 MB (DDR3))

This item shows the information of the total memory.

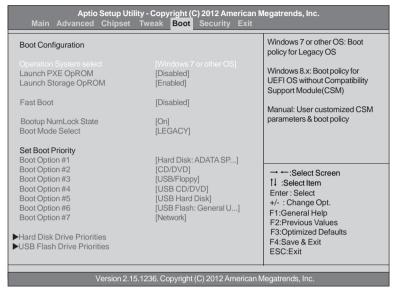
Memory Profiles (Automatic)

This item enables you to set the memory profiles. The selection of memory profiles impacts memory sizing behavior.

Press <Esc> to return to the Tweak Menu page.

Boot Menu

This page enables you to set the keyboard NumLock state.



Operation System Select (Windows 7 or other OS)

This item is used to select the operation system.

Launch PXE OpROM (Disabled)

This item enables or disables Launch PXE OpROM.

Launch Storage OpROM (Enabled)

This item enables or disables Launch Storage OpROM.

Fast Boot (Disabled)

Use this item to enable or disable the fast boot.

Bootup NumLock State (On)

This item enables you to select NumLock state.

Boot Mode Select (LEGACY)

Use this item to select boot mode.

Set Boot Priority

This item enables you to set boot priority for all boot devices.

Boot Option #1/ 2/ 3/ 4/ 5/ 6/ 7

These items show the boot priorities and can be used to set the boot priorities of various device categories.

Hard Disk/USB Flash Drive Priorities

These items enable you to specify the sequence of loading the operating system. Press <Enter> to see the submenu.

Security Menu

This page enables you to set setup administrator and password.

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc. Main Advanced Chipset Tweak Boot Security Exit				
Administrator Password Status User Password Status Administrator Password	Not Install Not Install	Set Administrator Password		
System Mode Secure Boot	Setup Not Active	→ ←:Select Screen 1↓:Select Item Enter: Select		
Secure Boot Secure Boot Mode	[Enabled] [Standard]	+/- : Change Opt. F1:General Help F2:Previous Values F3:Optimized Defaults F4:Save & Exit ESC:Exit		
Version 2.15.	1236. Copyright (C) 2012 An	nerican Megatrends, Inc.		

Administrator Password Status (Not Install)

This item shows administrator password installed or not.

User Password Status (Not Install)

This item shows user password installed or not.

System Mode (Setup)

This item shows system of secure boot (can be setup or user).

Secure Boot (Not Active/Enabled)

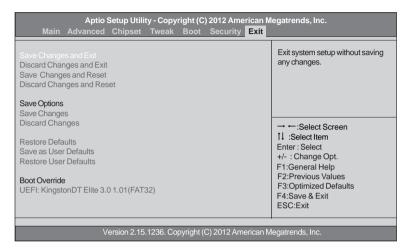
This item shows the active state of secure boot.

Secure Boot Mode (Standard)

This item is used to select secure boot mode, when you select standard mode, secure boot policy is fixed; when you select custom mode, the image execution policy and secure boot key databases are changeable.

Exit Menu

This page enables you to exit system setup after saving or without saving the changes.



Save Changes and Exit

This item enables you to exit system setup after saving the changes.

Discard Changes and Exit

This item enables you to exit system setup without saving any changes.

Save Changes and Reset

This item enables you to reset the system setup after saving the changes.

Discard Changes and Reset

This item enables you to reset system setup without saving any changes.

Save Options

This item enables you to save the options that you have made.

Save Changes

This item enables you to save the changes that you have made.

Discard Changes

This item enables you to discard any changes that you have made.

Restore Defaults

This item enables you to restore the system defaults.

Save as User Defaults

This item enables you to save the changes that you have made as user defaults.

Restore User Defaults

This item enables you to restore user defaults to all the setup options.

Boot Override

This item enables you to set the device order.

Updating the BIOS

You can download and install updated BIOS for this motherboard from the manufacturer's Web site. New BIOS provides support for new peripherals, improvements in performance, or fixes for known bugs. Install new BIOS as follows:

- If your motherboard has a BIOS protection jumper, change the setting to allow BIOS flashing.
- 2 If your motherboard has an item called Firmware Write Protect in Advanced BIOS features, disable it. (Firmware Write Protect prevents BIOS from being overwritten.)
- 3 Prepare a bootable device or create a bootable system disk. (Refer to Windows online help for information on creating a bootable system disk.)
- 4 Download the Flash Utility and new BIOS file from the manufacturer's Web site. Copy these files to the bootable device.
- Turn off your computer and insert the bootable device in your computer. (You might need to run the Setup Utility and change the boot priority items on the Advanced BIOS Features Setup page, to force your computer to boot from the bootable device first.)
- 6 At the C:\ or A:\ prompt, type the Flash Utility program name and the file name of the new BIOS and then press <Enter>. Example: AFUDOS.EXE 040706.ROM
- When the installation is complete, remove the bootable device from the computer and restart your computer. If your motherboard has a Flash BIOS jumper, reset the jumper to protect the newly installed BIOS from being overwritten. The computer will restart automatically.



Note: After flashing BIOS, recommend to shutdown system and remove AC power cord over 10 seconds to ensure that system is at G3 state. Then plug back the power cord, power on system and press to enter BIOS setup menu. Select [Load default setting], then [Save & Exit Setup].

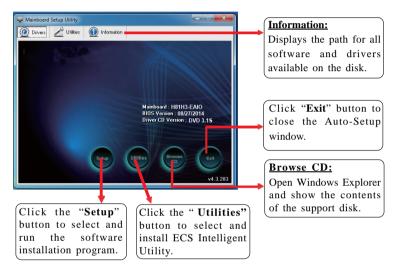
This concludes Chapter 3. Refer to the next chapter for information on the software supplied with the motherboard.

Memo

Chapter 4 Using the Motherboard Software

Auto-installing under Windows 8

The auto-install DVD-ROM makes it easy for you to install the drivers and software. The support software DVD-ROM disc loads automatically under Windows 8. When you insert the DVD-ROM disc in the DVD-ROM drive, the auto-run feature will automatically bring up the installation screen. The screen has four buttons on it: Setup, Utilities, Browse CD and Exit.



Running Setup

Follow these instructions to install device drivers and software for the motherboard:

1. Click Setup. The installation program begins:





The following screens are examples only. The screens and driver lists will be different according to the motherboard you are installing.

The motherboard identification is located in the upper left-hand corner.

Using the Motherboard Software

2. Click Next. The following screen appears:



- 3. Check the box next to the items you want to install. The default options are recommended.
- **4.** Click **Next** to run the Installation Wizard. An item installation screen appears:



5. Follow the instructions on the screen to install the items.



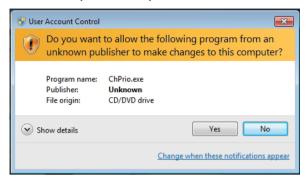
Drivers and software are automatically installed in sequence. Follow the onscreen instructions, confirm commands and allow the computer to restart a few times to complete the installation.

Windows 8 will show the following screen after system restart, you must select "Desktop" in the bottom left to install the next driver.



Using the Motherboard Software

Windows 8 will appear below UAC (User Account Control) message after the system restart. You must select "Yes" to install the next driver. Continue this process to complete the drivers installation.



Manual Installation

If the auto-install DVD-ROM does not work on your system, you can still install drivers through the file manager for your OS (for example, Windows Explorer). Look for the chipset and motherboard model, and then browse to the directory and path to begin installing the drivers. Most drivers have a setup program (SETUP.EXE) that automatically detects your operating system before installation. Other drivers have the setup program located in the operating system subfolder.

If the driver you want to install does not have a setup program, browse to the operating system subfolder and locate the readme text file (README.TXT or README.DOC) for information on installing the driver or software for your operating system.

Memo

Chapter 5

Trouble Shooting

Start up problems during assembly

After assembling the PC for the first time you may experience some start up problems. Before calling for technical support or returning for warranty, this chapter may help to address some of the common questions using some basic troubleshooting tips.

Solving Problems

Follow these tips when you troubleshoot your computer:

- If you added or removed a part before the problem started, review the installation procedures and ensure that the part is correctly installed.
- If a peripheral device does not work, ensure that the device is properly connected.
- If an error message appears on the screen, write down the exact message. This message may help support personnel diagnose and fix the problem(s).
- If an error message occurs in a program, see the program's documentation.



Note: The procedures in this document were written for the Windows default view, so they may not apply if you set your computer to the Windows Classic view.

Display Problems

Problem: Blank screen or no image is displayed on the monitor.

Troubleshooting and problem resolution:

Check that the LCD/LED screen has been turned on; If not, press the LCD/LED On/Off button to turn on the LCD/LED.

If still cannot solve the problem, contact to our Customer Service.

Problem: You need to change display property settings.

Setting display background and icon properties:

- 1. Right-click the desktop anywhere except over an icon, then select Personalize from the pop-up menu.
- 2. From here, select the appropriate options to:

- · Change the desktop background
- · Select a screen saver
- · Select colors and appearance options for icons and characters
- · Set resolution and colors by using Display Settings options.

Problem: Ripple on screen

Troubleshooting and problem resolution:

- 1. Check for devices located less than one meter from the computer such as refrigerators, electric fans, electric dryers, UPSs, regulators, fluorescent lamps
- or other computers that may be generating magnetic interference.
- 2. Move any interfering devices away from the computer.
- 3. If the problem persists, consult with our Service.

Troubleshooting Audio Problems

Problem: No sound from integrated speakers.

Troubleshooting and problem resolution:

- Adjust the windows volume control Double-click the speaker icon in the lower-right corner of your screen. Ensure that the volume is turned up and that the sound is not muted. Adjust the volume, bass, or treble controls to eliminate distortion.
- · Reinstall the audio driver.
- Disconnect headphones from the headphone connector Sound from the speakers is automatically disabled when headphones are connected to the computer's side-panel headphone connector.

Problem: No sound from headphones.

Troubleshooting and problem resolution:

- Check the headphone cable connection Ensure that the headphone cable is securely inserted into the headphone connector.
- Adjust the windows volume control Click or double-click the speaker icon in the lower-right corner of your screen. Ensure that the volume is turned up and that the sound is not muted.

Maintenance and care tips

Your computer, like any electrical appliance, requires proper care and maintenance. Here are some basic PC care tips to help prolong the life of the motherboard and keep it running as best as it can.

- 1. Keep your computer in a well ventilated area. Leave some space between the PC and the wall for sufficient airflow.
- 2. Keep your computer in a cool dry place. Avoid dusty areas, direct sunlight and areas of high moisture content.
- 3. In places of hot and humid weather you should turn on your computer once every other week to circulate the air and prevent damage from humidity.
- 4. If possible, ensure the power cord has an earth ground pin directly from the wall outlet. This will reduce voltage fluctuation that may damage sensitive devices.

Panel clean tips

The following steps explains how to clean the panel:

- 1. When cleaning the computer, please make sure that the computer is switched off.
- 2. Put on gloves to prevent stains on the touch panel and prevent injured by the sharp edge of the touch panel.
- 3. Do not hold FPC/Copper tail while handing the touch panel.
- 4. Do not pile up touch panel and put heavy matter on touch panel.
- 5. Do not add any stress on touch film.
- 6. Use dry cloth or soft cloth with alcohol, neutral detergent or ethanol for clearing the touch panel in case of dirt on it.
- 7. Do not use any organic solvents except alcohol.

Memo